Jeopardy Assessment

for the Proposed Incidental Taking Authorization
of the Butler's Garter Snake

Springdale Road Bridge Project
WDOT Project ID # 2777-04-70 & B-67-310
Cities of Brookfield and Pewaukee, Waukesha County, Wisconsin

Background

The state-threatened Butler's garter snake is the smallest of the five Wisconsin garter snake species. Both sexes of this species reach maturity during their second full year and females deliver 4-19 live-born young in mid to late summer. This species requires a moderately open to open canopy habitat, preferably with both upland and wetland habitat. Butler's naturally hibernate in open-canopy wetlands (sedge meadows, fringes of cattail marshes, etc.) but are also known to occupy sites that provide other means for successful overwintering (i.e. old landfills where conditions provide access below the frostline and where adequate moisture exists).

The Butler's garter snake is a colonial species that is restricted to several southeastern counties in Wisconsin. There are currently 30 locations where this species has been documented from 1973 to present. Twenty-five of these records have been documented since 1990. Most sites that have been moderately to heavily surveyed for Butler's show a healthy age-class structure, indicating that regular recruitment is occurring on those sites. Surveys and monitoring since its listing in 1997 reveal that Butler's often occur in very large numbers on relatively small sites (i.e. 400+ snakes detected on a 20-acre site with less than 50% suitable [open canopy] habitat). Three intensive survey/monitoring efforts associated with mitigation for incidental take to date have involved large numbers of Butler's garter snakes (over 1200 Butler's on three isolated sites along Lincoln Creek within the City of Milwaukee). Surveys have also demonstrated that Butler's can occur, sometimes in high numbers, on highly disturbed and degraded sites. One example is the location of 62 Butler's during one survey of a brownfield site in the industrial heart of Milwaukee. Most of the snakes were found under pieces of broken concrete in a large, abandoned, gravel parking lot that was adjacent to a small wetland.

In Summary, the Butler's garter snake is a fast-maturing species with potentially high annual recruitment. It can sustain populations on highly disturbed sites if the disturbance factors are eliminated and suitable wetlands are present on or adjacent to these sites. Since 1997, most sites where Butler's were suspected to occur, based on proximity to known range and habitat and which were subsequently surveyed, verified their presence.

Jeopardy Assessment

The proposed Springdale Road project over the Fox River will be constructed in suitable Butler's gartersnake habitat that is part of a significant conservation (Tier 3) site. Butler's gartersnakes have been documented in this habitat patch and the project has the potential to cause incidental take of the snake. The project is being proposed to provide more adequate drainage of the Fox River following flooding events. The existing bridge is narrow and results in the water being temporarily dammed up behind the bridge. Much of the habitat in the vicinity of the bridge is poor quality snake habitat so take of the snake is expected to be limited. Because the bridge will primarily involve wetland habitat, little can be done to minimize take of the snake by limiting the time period that the bridge can be constructed. However, the new bridge will connect the habitat patch on the east side of Springdale Road to a smaller, suitable habitat patch on the west side of the road and the connectivity will result in an overall gain to the habitat patch, which in the long run will benefit the snake. The project will actually provide a benefit to the species in

this location. Exclusion fencing will be installed to keep snakes out of the upland work area, few snakes are expected to occur in the project area.

The department has determined that the proposed project will not jeopardize the continued existence or recovery of the state population of these snakes or the whole plant-animal community of which they are a part if the conservation plan is strictly adhered to.